

SPECIFICATION AMENDMENTS

[0005] Certain high temperature flexible circuit board applications also require that the base film be attached to a copper film by the use of a thermally curable adhesive. These adhesives typically are cured under pressure at temperatures between 120-150°C, and thus the entire laminate structure must be heated to these temperatures in a hot press, autoclave or equivalent equipment. Once the adhesive is cured, the laminate is cooled to room temperature. It is important that the coefficient of thermal expansion (CTE) of the ~~[[copper film,]]~~ base film and adhesive be ~~sufficiency~~ sufficiently similar to the CTE of the copper film over the temperature range from 150 to 23°C so that residual stresses do not develop which might cause the laminate to curl. In order to prevent curl, the base film must have a CTE value of 10-85 ppm/°C, when measured between 120 and 150°C, and preferably also has a CTE value of 10-42 ppm/°C, when measured between 25 and 90°C ~~[[,]]~~. Note that these CTE values are specific to biaxially oriented films used to make laminates and are not required in films used for other heat resistant packaging applications, such as cook-in bags, and is not believed to have been addressed in the prior art.

[0019] A fifth embodiment of the present invention is a process for the preparation of a thermoplastic article wherein heat and pressure are applied to one or more laminates, wherein at least one of said laminates comprises, in order:

- (a) at least one copper layer;
- (b) at least one thermally curable adhesive; and
- (c) the biaxially oriented and heat-set polyester film as defined above for the first and second embodiments; and

wherein said heat is applied to said laminate at a temperature of about 120 to 180 °C, preferably, about 120 to ~~480~~ 150 °C, for a period of time sufficient to cure the thermally curable adhesive.

[0021] A seventh embodiment of the present invention is a process for the preparation of the aforesaid film laminate comprising the steps of:

- (1) preparing a multi-layer sandwich comprising, in order:

- (a) at least one thermally curable adhesive layer; and
 - (b) at least one layer of the biaxially oriented polyester film of the first and second embodiments; and
- (2) ~~(c)~~ heating the multi-layer sandwich of step (1) at a temperature of about 120 to 150°C for a period of time sufficient to cure the thermally curable adhesive.